## PATENT ABSTRACTS OF JAPAN

(11)Publication number:

2000-045813

(43)Date of publication of application: 15.02.2000

(51)Int.CI.

F02D 29/02

B60K 41/02

B60L 11/14

(21)Application number: 10-209377

(71)Applicant: NISSAN MOTOR CO LTD

(22)Date of filing:

24.07.1998

(72)Inventor: KANEKO YUTARO

NAMERO TOTARO

KITADA SHINICHIRO KIKUCHI TOSHIO

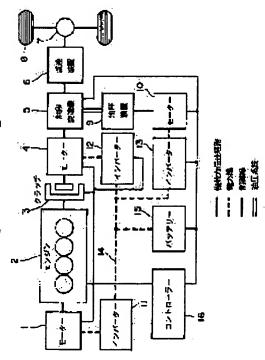
**OWADA MASARU** 

## (54) CONTROL DEVICE FOR PARALLEL-HYBRID VEHICLE

## (57) Abstract:

PROBLEM TO BE SOLVED: To ensure output at time of backward travel in a parallel-hybrid vehicle having no reversing mechanism in its transmission.

SOLUTION: A control device for a parallel-hybrid vehicle which travels backward by releasing a clutch 3 to reverse a second motor 4, is provided with a propulsion mechanism, in which an engine 2 and a first motor 1 are connected to the input shaft of the clutch 3, the second motor 4 and the input shaft of a continuously variable transmission 5 are connected to the output shaft of the clutch 3, and power is transmitted from the output shaft of the continuously variable transmission 5 to driving wheels 8, and a battery 15 for performing acceptance and delivery of electric power between the first motor 1 and the second motor 4. Further, a capacity detecting means 16 for detecting the possible output capacity of the battery 15, and a power generation control means 16 which starts power generation by driving the first motor 1 by means of the engine 2 when the detected value of the possible output capacity during



backward reaches a preset threshold value or less, are provided. Power to be supplied to the second motor 4 for vehicle-travelling, at the time of backward travelling, can thus be ensured, and it can be prevented that the output of the second motor 4 does not meet the required output.

## **LEGAL STATUS**

[Date of request for examination]

24.04.2002

[Date of sending the examiner's decision of rejection]

[Kind of final disposal of application other than

the examiner's decision of rejection or application converted registration]

[Date of final disposal for application]

[Patent number]

3508559

[Date of registration]

09.01.2004

[Number of appeal against examiner's decision of

rejection]

[Date of requesting appeal against examiner's

decision of rejection]

[Date of extinction of right]

Copyright (C); 1998,2003 Japan Patent Office